**DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

# WELDING INSPECTION REPORT

**Resident Engineer:** Casey, William
**Address:** 333 Burma Road
**City:** Oakland, CA 94607

**Report No:** WIR-028142
**Date Inspected:** 09-Aug-2012

**Project Name:** SAS Superstructure
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV
**Contractor:** American Bridge/Fluor Enterprises, a JV

**OSM Arrival Time:** 700
**OSM Departure Time:** 1930
**Location:** jobsite

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|---|---|---|---|---|---|---|---|---|
| **CWI Name:** | See Body of Report | | | **CWI Present:** | ☑ Yes | ☐ No | | |
| **Inspected CWI report:** | ☐ Yes | ☑ No | ☐ N/A | **Rod Oven in Use:** | ☑ Yes | ☐ No | ☐ N/A | |
| **Electrode to specification:** | ☑ Yes | ☐ No | ☐ N/A | **Weld Procedures Followed:** | ☑ Yes | ☐ No | ☐ N/A | |
| **Qualified Welders:** | ☑ Yes | ☐ No | ☐ N/A | **Verified Joint Fit-up:** | ☑ Yes | ☐ No | ☐ N/A | |
| **Approved Drawings:** | ☑ Yes | ☐ No | ☐ N/A | **Approved WPS:** | ☑ Yes | ☐ No | ☐ N/A | |
| | | | | **Delayed / Cancelled:** | ☐ Yes | ☑ No | ☐ N/A | |

**Bridge No:** 34-0006
**Component:** OBG

**Summary of Items Observed:**

At the start of the shift this Quality Assurance Inspector (QA) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) welding and Quality Control (QC) personnel. The observations and inspections were performed as noted below:

West OBG

This QAI observed Jin Pei Wang (7299) preheating the circumference weld on Deck Access Hole 12W-PP116. 5-W5. Mr. Huang was utilizing a rosebud style torch to achieve the Quality Control Documented, and randomly verified by this QAI preheat of 200F. Quality Control Technician Chris Concha was observed throughout the welding process checking preheat using a Rayteck Mini-Temp non-contact thermometer at set intervals.

QAI witnessed Jin Pei Wang welding Deck Access Hole 12W-PP116.5-W5 utilizing the Fluxed Cored Arc Welding process to the parameters of approved Welding Procedure Specification ABF-WPS-D15-3040-A-1. This QAI observed Chris Concha at various times throughout the shift documenting welding parameters using a Fluke Model 376 meter. This QAI randomly verified the welding parameters throughout the shift, at the time of verification the parameters were as follows: 271 Amps, 24 Volts. The parameters verified were within the range of the above-mentioned approved Welding Procedure Specification.

This QAI observed Chris Concha Quality Control Technician perform visual inspection on the successive weld beads of the above-mentioned weld. Mr. Concha marked discontinuities in the weld that looked suspect and instruct the welder to remove them by grinding.

East OBG

This QAI observed Guo Wu Chan preheating the circumference weld on Deck Access Hole 12E-PP116.5-E5. Mr. Chan was utilizing a rosebud style torch to achieve the Quality Control Documented, and randomly verified by this QAI preheat of 150F. Quality Control Technician Salvador Merino was observed throughout the welding process checking preheat using a Fluke Model 62 mini non-contact thermometer at set intervals.

QAI observed Guo Wu Chan welding deck access hole 12E-PP116.5-E5 utilizing the Shield Metal Arc Welding process to the parameters of the approved Welding Procedure Specification ABF-WPS-D15-1040-C1. This QAI observed Salvador Merino at various times throughout the shift documenting welding parameters using a Fluke Model 376 meter. This QAI randomly verified the welding parameters throughout the shift, at the time of verification the parameters were as follows: 176 amps. The parameters verified were within the range of the above-mentioned approved Welding Procedure Specification.

This QAI observed Salvador Merino Quality Control Technician perform visual inspection on the successive weld beads of the above-mentioned weld. Mr. Merino marked discontinuities in the weld that looked suspect and instruct the welder to remove them by grinding.

This QAI observed Jin Pei Wang (7299) preheating the circumference weld on Deck Access Hole 12E-PP116. 5-E5. Mr. Wang was utilizing a rosebud style torch to achieve the Quality Control Documented, and randomly verified by this QAI preheat of 200F. Quality Control Technician Chris Concha was observed throughout the welding process checking preheat using a Rayteck Mini-Temp non-contact thermometer at set intervals.

QAI witnessed Jin Pei Wang welding Deck Access Hole 12E-PP116.5-E5 utilizing the Fluxed Cored Arc Welding process to the parameters of approved Welding Procedure Specification ABF-WPS-D15-3040-A-1. This QAI observed Sal Merino at various times throughout the shift documenting welding parameters using a Fluke Model 376 meter. This QAI randomly verified the welding parameters throughout the shift, at the time of verification the parameters were as follows: 284 Amps, 22.4 Volts. The parameters verified were within the range of the above-mentioned approved Welding Procedure Specification.

This QAI observed Sal Merino Quality Control Technician perform visual inspection on the successive weld beads of the above-mentioned weld. Mr. Merino marked discontinuities in the weld that looked suspect and instruct the welder to remove them by grinding.

# WELDING INSPECTION REPORT

*( Continued Page 3 of 3 )*



**Summary of Conversations:**

There were general conversations with Quality Control Inspector Chris Concha, at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift. All observations were relayed to Bill Levell.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510 385 5910, who represents the Office of Structural Materials for your project.

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| **Inspected By:** | Daggett,Matt | Quality Assurance Inspector |
| **Reviewed By:** | Levell,Bill | QA Reviewer |